

ABSTRACT

This invention intends to provide a relatively inexpensive image recognition apparatus offering a high image recognition rate. An image recognition apparatus provided by 5 the invention is configured to recognize movements of players matched against each other between domains partitioned with such an obstacle as net in a sport match or game from contents including a television program being telecasted to show the sport match or game, an image material in an uncompleted state 10 for broadcasting and contents recorded in such a recording medium as a VTR, the image recognition apparatus including: a picture information obtaining section configured to obtain picture information containing an image of a movement of at least one of the players playing in the sport match or game 15 from the contents; a sound information obtaining section 103 configured to obtain sound information generated in synchronism with the picture information from the contents, the sound information including information on a hitting sound generated upon hitting of such an instrument as a ball moving 20 between the domains to serve as an object of score count in the sport match or game; a hitting time information specifying section 105 configured to specify a hitting time at which the instrument is hit based on the sound information obtained by the sound information obtaining section 103; a rule 25 information storage section 102 configured to store rule information for carrying out the sport match or game; and an

image substance recognizing section 106 configured to
recognize a substance of an image containing the image of the
movement of the player provided by the picture information
based on the picture information obtained by the picture
5 information obtaining section, a position of the instrument at
the hitting time specified by the hitting time specifying
section 105 and the rule information stored in the rule
information storage section 102.

ABSTRACT (established by the ISA)

An image recognition apparatus is configured to recognize movements of players in a sport match or game from contents recording a sport match or game wherein the players match 5 against each other between domains partitioned with such an obstacle as net, the image recognition apparatus including: a picture information obtaining section configured to obtain picture information containing an image of a movement of at least one of the players from the contents; a sound 10 information obtaining section 103 configured to obtain sound information generated in synchronism with the picture information from the contents, the sound information including information on a hitting sound generated upon hitting of such an instrument as a ball moving between the domains; a hitting 15 time information specifying section 105 configured to specify a hitting time at which the instrument is hit based on the sound information; a rule information storage section 102 configured to store rule information for carrying out the sport match or game; and an image substance recognizing 20 section 106 configured to recognize a substance of an image containing the image of the movement of the player provided by the picture information based on the picture information, a position of the instrument at the specified hitting time and the rule information.